NERC forecasts adequate capacity this winter for United States, Canada

Electricity generating capacity, transmission systems and fuels are expected to be adequate this winter in the United States and Canada even as peak demand is predicted to be higher than last winter, the North American Electric Reliability Council forecasts in its "2006/2007 Winter Assessment." released Nov. 16.

Generating capacity margins have not changed significantly from last winter, with all regions and subregions projected to meet margin requirements, the assessment said. Even if extreme weather occurs, causing peak demands to exceed base forecasts by as much as 3% to 8%, available capacity margins will be adequate, NERC said.

Transmission reinforcements in southwestern Connecticut and Boston should result in "significant improvements to reliability" in the two areas, both of which NERC had previously placed on its reliability "watch list," the report said.

Powder River Basin coal deliveries, which NERC cited as a problem in its "2006 Long-Term Reliability Assessment," have improved significantly and coal stocks are increasing, the assessment said. As a result, NERC has removed the Powder River Basin coal delivery issue from its watch list.

Peak demands for the upcoming winter are forecast to be higher than actual peaks recorded last winter in all areas except New England, Texas, the Southwest and parts of Missouri, NERC said. In New England, electricity price increases in 2005 and 2006 were the main factors leading to the lower peak demand forecast for this winter. In other areas, colder-than-normal weather last winter is the primary reason why this winter's forecasts are lower than last year's actual demands, the report noted.

While transmission systems are expected to be adequate for reliability, some constraints may occur that may limit desired market transactions, the report said. The Tennessee Valley Authority transmission system has experienced large and volatile flows in recent years due to large power transfers between areas to the north and south, the report said, adding that those flows may occur again this winter.

In addition, critical flowgates in the ReliabilityFirst Corp. region, which includes the PJM Interconnection LLC and Midwest ISO territories, have experienced large and volatile power flows in recent years due to large power transfers across and through these systems. "If such flows occur again this winter, operators may be required to limit power exchanges to maintain system reliability," NERC said in a Nov. 16 news release.

ReliabilityFirst began operation on Jan. 1 as one of the eight regional reliability organizations now under NERC. ReliabilityFirst's total internal demand forecast for winter 2006-2007 is 154,800 MW, the assessment said.

Because home heating use places higher demands on winter natural gas supplies and the gas transportation system, the availability of natural gas for electricity generation is of

greater concern during the winter than during the summer, NERC President and CEO Rick Sergel said in the news release. Texas has the highest dependence on natural gas for electricity generation, about 70%, with about one-fourth of gas-fueled capacity possessing the ability to switch to oil for limited periods if natural gas supply is interrupted, NERC said.

New England and Florida, which also have a high dependence on natural gas, have taken steps to avoid problems by coordinating more closely with natural gas pipeline operators, NERC noted. In addition, since last winter, New England has converted about 1,700 MW of natural gas-only capacity to dual-fuel capability.

Reliability regions forecast winter demands

- * The Electric Reliability Council of Texas Inc. forecasts a peak demand for this winter of 44,715 MW, which reflects a 7% decrease from the winter 2005-2006 actual peak demand of 48,064 MW set in December 2005.
- * The Florida Reliability Coordinating Council expects to reach its 2006-2007 winter peak demand of 48,296 MW in January, which represents a projected demand increase of 8.2% over the actual 2005-2006 winter peak demand of 44,633 MW, the assessment said. An increase is forecast in light of last year's mild winter.
- * In January 2006, several new members joined the Midwest Reliability Organization who were previously members of the former Mid-America Interconnected Network Inc. region, making direct comparisons to last year's data difficult, NERC noted. The projected MRO capacity margin is 25.2%, considered sufficient to maintain resource adequacy for the upcoming winter, the report said.
- * The total internal demand forecast for the Northeast Power Coordinating Council for the 2006-2007 winter is 115,437 MW. This includes 66,576 MW in Canadian systems and 48,861 MW in U.S. systems. All of the NPCC subregions expect sufficient resources to be available to meet projected demands during the upcoming winter, the assessment said.
- * The Southeastern Electric Reliability Council forecasts total internal demand for the 2006-2007 winter to be 166,344 MW, which is 11,545 MW, or 7.5%, higher than the actual 2005-2006 winter peak of 154,799 MW that occurred in December 2005.
- * In the Southwest Power Pool, the winter total internal demand is projected to be 30,183 MW, the assessment said.
- * The aggregate Western Electricity Coordinating Council 2006-2007 winter total internal demand is projected to be 130,255 MW, including 107,524 MW in U.S. systems, 21,258 MW in Canadian systems and 1,473 MW in the Mexican system. The forecast is based on normal weather conditions and is 1% above last winter's actual peak demand of 128,934 MW, the NERC assessment said.